

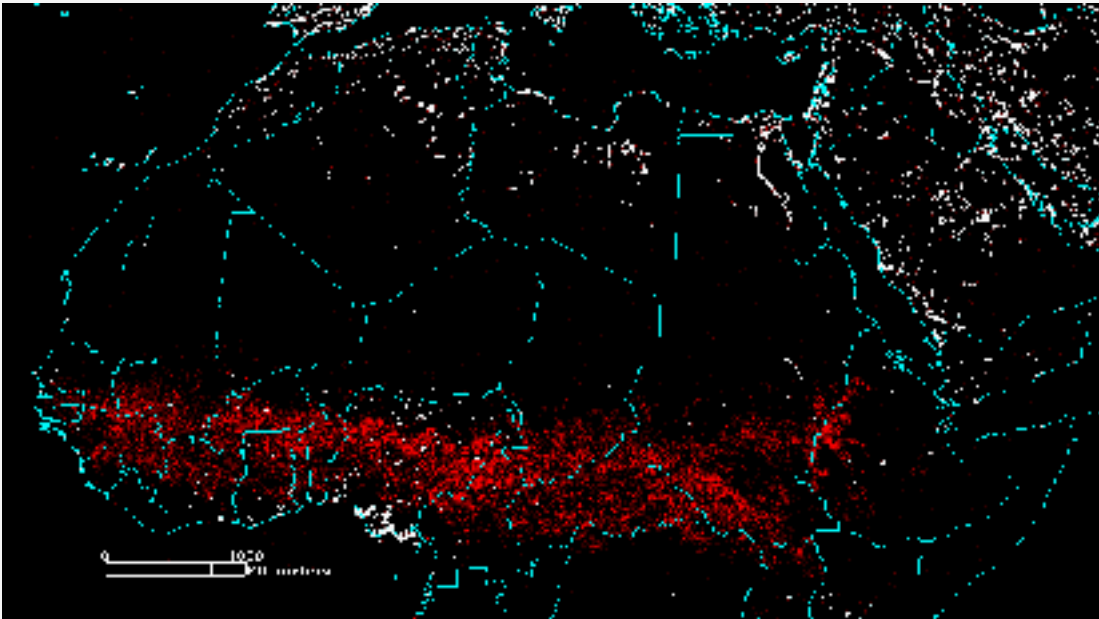


Activity 7: Fires in Africa

In this exercise, you will examine the location of fires in Africa and their impact on land use and populations. **Note:** New ArcView instructions will be explained in this Activity. Please refer to Activities 1 through 6 for ArcView instructions that you've already completed in those exercises.

ArcView Steps

Step 1



Start ArcView , Open a new project, Create a View,  New 

Set the Working Directory to where your data is located.

Step 2

Rename the View.

Choose Properties from the View pull-down menu, and rename the view to "Fires, Landcover Types and Population Densities in Africa".

Select "decimal degrees" from the Map Units pull down list.

Select "kilometers" from the Distance Units pull down list.

Click on Projection and check to make sure the Category is "Projections of the World" and the Type is "Geographic".

Step 3

Add Africa Countries, Landuse, and Population Densities to the View

Add the following themes to the view from the esri_dat directory:

country.shp - Outlines of countries in Africa.

landuse.shp - Land use and land cover in Africa.

popden.shp - Population density in Africa.

Step 4

Add Africa Fires to the View.

Click the Add Theme  button.

Navigate the folder where your data is stored.

Add the firept.shp file. This file was derived from every fire that were observed from satellite from October 1994 through March 1995.

Click OK to add this theme to the view.

Step 5

Rename the Themes under Themes-->Properties.

Rename the landuse.shp theme to Landcover

Rename the popden.shp theme to Population Densities

Rename the country.shp theme to Countries

Rename the firept.shp theme to Fires

**Step
6**

Display the Population Density Theme as a Graduated Color.

Double-click on the Population Density theme to bring up the Legend Editor. In the Legend Editor window select "Graduated Color" as the Legend Type. Select "Density" for the Classification Field.

Select "Yellow Monochromatic" for the Color Range.

Click Apply in the Legend Editor to apply your changes to the view.

Leave the Legend Editor open.

**Step
7**

Display the Landcover as a Unique Value.

Double-click on the Landcover theme.

In the Legend Editor window select "Unique Value" as the Legend Type.

Select "Zone" for the Values Field.

Select "Equatorial Rainforest" for the Color Range.

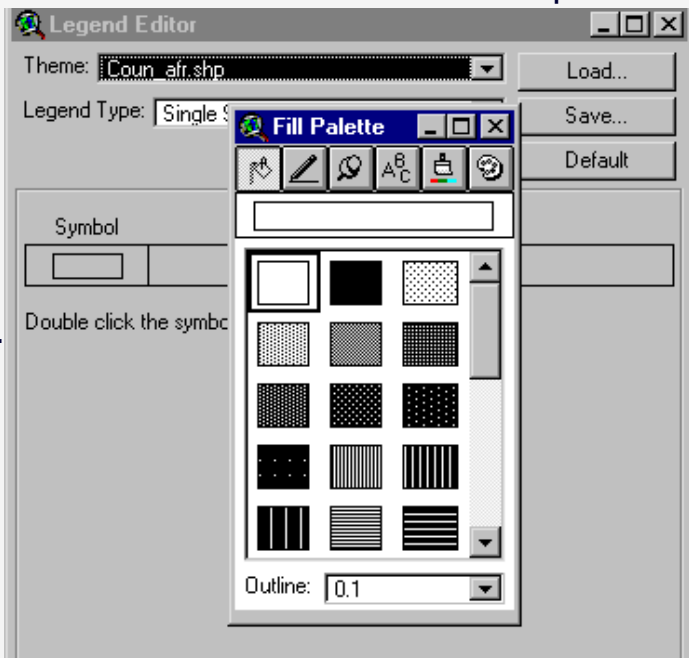
Click Apply in the Legend Editor to apply your changes to the view.

Leave the Legend Editor open.

**Step
8**

Change the Colors, Sizes, and Symbols of the Themes.

Countries theme: Make the theme transparent. Do this via the Legend



The screenshot shows the 'Legend Editor' window with the 'Theme' set to 'Coun_afr.shp' and 'Legend Type' set to 'Single Symbol'. A 'Fill Palette' window is open, displaying various fill patterns. The 'Symbol' section in the Legend Editor shows a white box. The 'Outline' is set to 0.1. The 'Fill Palette' has a 'Paint Bucket' icon at the top left. The 'Symbol' section in the Legend Editor has a 'Double click the symbol' label.

Editor. Double click the symbol

Select the paint bucket

icon. and select the upper left (white) box. Click Apply.

Step 9 Display the Fires as Red

Double-click on the Fires theme to access the Legend Editor.
In the Legend Editor window, click on Load.
Find the firept.avl file in the folder where your data is stored.

Click Apply in the Image Colormap window.
Close the Legend Editor.

Step 10 Arrange the Themes in the View Window

Arrange the themes in your view window in the following order:

- Fires
- Landcover
- Population Densities
- Countries

Step 11 Display the Themes in the View

Click on the raised box to the left of the Theme names to make a check mark and see the coverages displayed in the View window. You may need to maximize or resize the ArcView window and the View window to see the entire view.

You will need to alternate turning on the Landcover theme and the Population Density theme. The fires in the Fires theme should be red and the rest of the image should be transparent.

Step 12 Open a New a View and Rename the View.

Add a new view to the project and rename the view "Fires in Africa".

Step 13 Add Africa Fires to the View and Display the Fires as Red

Repeat steps 4 and 9 for this view: Add the firept.shp theme and load the firept.avl legend as before to display the fires as red.

- Step 14** Create and Print Two layouts
- Create and a print a Layout of the Fires, Population Density and Countries.
- Create and a print a Layout of the Fires, Land Cover and Countries.
-

Questions

- Question 1** Where are most of the fires located in Africa?
- Question 2** What type of land cover are most of the fires in Africa associated with?
- Question 3** Are most of the fires in Africa located in densely populated areas?
-

[Back to Africa Lesson Index](#)

[U.S. Department of the Interior](#)

[U.S. Geological Survey](#)

[Rocky Mountain Mapping Center](#)

URL:<http://rockyweb.cr.usgs.gov/outreach/africa/act7.html>

Last modified: 1 September 2004